

**METHOD FOR FORMING MIXED LIQUID CRYSTAL  
BINARY MIXTURE WITH V-SHAPED SWITCHING**

5       The present invention provides a mixed liquid crystal binary mixture with V-shaped switching electro-optical response characteristic, which is produced by achiral swallow-tailed material doped with the antiferroelectric liquid crystal material or with the ferroelectric liquid crystal material. The achiral swallow-tailed  
10 compound as the main material that is doped with the antiferroelectric liquid crystal material or with the ferroelectric liquid crystal material to produce the binary mixture, wherein the mixed liquid crystal binary mixture exhibits the electro-optical response of V-shaped switching in the antiferroelectric phase or in the ferroelectric phase.